



WEAPONS AND TACTICS FLIGHT

This Air Force Manpower Standard (AFMS) quantifies the manpower required to accomplish the tasks described in the process oriented description for varying levels of workload. The Weapons and Tactics Flight assesses the tactical capability of the unit and its aircraft; develops procedures and unit tactics for planning and employing combat/operational missions; advises on operational capabilities, limitations, status of resources; acts as office of primary responsibility (OPR) for evaluating publications and scenarios; and develops, incorporates, and evaluates tactics in exercise scenarios. This standard applies to AMC, ACC, USAFE, and PACAF; and AETC only at Altus AFB, Luke AFB, and Tyndall AFB. It does not apply to ACC units at Beale AFB, Offutt AFB, Tinker AFB, and Keflavik AB; PACAF units at Anderson AB and Hickam AFB; AMC units at Andrews AFB and Scott AFB; AFSOC, AFSPC, and AFMC; Air National Guard and Air Force Reserve; and flights that have been cost compared (OMB Circular A-76). This AFMS was developed in accordance with the requirements outlined in Weapons and Tactics directives and AFMAN 38-208, *Air Force Management Engineering Program (MEP)*. Send comments and suggested improvements on AF Form 847, **Recommendation for Change of Publication**, through channels, to AFCQMI/MQAA, 550 E Street East, Randolph AFB, Texas 78150-4451.

★SUMMARY OF CHANGES

This AFMS supersedes AFMS 13B1, 6 February 1996. This manpower standard is revised to update organizational designations.

1. Core Composition. This AFMS provides the manpower needed to support an objective wing Weapons and Tactics Flight. The core manpower level for this AFMS was developed for a Weapons and Tactics Flight to support an objective wing having three single-seat fighter squadrons.

1.1. Core Flight Manpower Required. 5

1.2. Core Range. 3 - 16

1.3. Programming Factors. Type of Primary Aircraft Inventory (PAI), Number of Aircraft Operations Squadrons, and Number of Mission Design Series.

2. Standard Data:

2.1. Approval Date. 16 November 1995

2.2. Man-hour Data Source. Expert Team Workshop.

2.3. Man-hour Equation. Decision Matrix (Attachment 5).

2.4. Workload Factors:

2.4.1. X1:

2.4.1.1. Title. Mission Design Series (MDS).

2.4.1.2. **Definition.** The number of different MDS assigned to the wing. Do not include Operational Support Aircraft (OSA) (e.g., C-12, C-20, C-21), Trainer (e.g., T-1, T-3, T-37, T-38, T-41, T-43, AT-38), or Medivac (C-9) Aircraft. MDS are categorized by an alpha prefix identifier, a numeric identifier, and an alpha suffix identifier (e.g., F-15C). If aircraft have different prefix identifiers or numeric identifiers, count each as a separate MDS. Do not count aircraft with different suffix identifiers and identical prefix and numeric identifiers as a different MDS. One exception to this rule is that the F-15E is differentiated as a separate MDS from the other F-15 aircraft. A second exception is that the A-10A and OA-10A are counted as only one MDS.

MDS EXAMPLES

F-15C and F-15D count as one MDS.

F-15C and F-15E count as two MDS (exception).

A-10A and OA-10A count as one MDS (exception).

F-15C and F-111F count as two MDS.

KC-135R, C-141B, C-5B, and T-37B count as 3 MDS.

2.4.1.3. Source. Determine MDS counts based on MAJCOM or local wing records of PAI.

2.4.2. X2:

2.4.2.1. Title. Primary Aircraft Type.

2.4.2.2. **Definition.** The primary aircraft type is the MDS assigned to the most number of squadrons in the wing. If more than one MDS meets this criteria, select the MDS with the most allowable aircrew positions (see Attachment 5 for a summary of allowable aircrew positions by aircraft). For example, the primary aircraft type for a wing with one operational squadron of 16 C-130s, one operational squadron of 24 A/OA-10s, and one operational squadron of 18 F-16s is the C-130.

2.4.2.3. Source. Determine primary aircraft type based on MAJCOM or local wing records of PAI aircraft.

2.4.3. X3:

2.4.3.1. Title. Aircraft Operations Squadron.

2.4.3.2. **Definition.** The number of aircraft operations squadrons assigned to the wing that are supported by the Weapons and Tactics Flight. Do not include squadrons with only OSA, training, or medivac aircraft missions.

2.4.3.3. Source. Determine the number of aircraft operations squadrons based on MAJCOM or local wing records.

2.5. Points of Contact:

2.5.1. **AFCQMI Representative.** Mr. Richard Fuller, AFCQMI/MQAA, DSN 487-5910

2.5.2. Functional Representatives:

Maj Corso, HQ USAF/XOOT, DSN 227-7892

Capt Cummings, HQ AMC/XOZ, DSN 576-2201

SMSGT Brantly, HQ AMC/XPMR, DSN 576-3356

Mr. Whitaker, HQ ACC/XPME, DSN 574-5001

Lt Col Schaller, HQ ACC/DOTW, DSN 574-2947

2.6. **Responsibilities.** The OPR is responsible for maintenance of this standard and coordination of changes. Changes will be coordinated with the Air Force career field managers of all affected AFSCs. The OCR will provide technical assistance as required.

2.6.1. **OPR.** HQ USAF/XOOT, Lt Col Noss, DSN 227-1773

2.6.2. **OCR.** HQ USAF/XPMR, Maj Welch, DSN 223-4152

3. **Application Instructions:** See the application worksheet at Attachment 5.

4. Statement of Conditions. Standard hours of operation for Weapons and Tactics work centers are eight hours per day, five days per week. On occasion assigned personnel work overtime or irregular hours.

JAMES M. JENKINS, Major, USAF
Chief, Systems Integration and Support Division
Air Force Center for Quality and Management Innovation

Attachments

1. Process Oriented Description
2. Standard Manpower Table
3. Variances
4. Process Analysis Summary
5. Application Worksheet

PROCESS ORIENTED DESCRIPTION

Weapons and Tactics Flight

- A1.1.** Ensures assigned personnel are familiar with the wing/unit mission/tasking and expected enemy threat.
- A1.2.** Assesses the combat capability of the unit, documents training, equipment, support or tactics deficiencies, and reports them to the Operations Group Commander.
- A1.3.** Ensures adequate procedures are developed for planning combat/operational missions.
- A1.4.** Establishes a strong liaison with maintenance, munitions, and avionics functions.
- A1.5.** Establishes a strong liaison with unit intelligence.
- A1.6.** Acts as OCR for unit training, exercise, and evaluation publications and scenarios to ensure they are based on sound tactics.
- A1.7.** Coordinates to ensure Stan/Eval examiners remain abreast of all combat employment concepts and all mission qualification flights reflect unit taskings.
- A1.8.** Manages unit involvement in the tactics development program. Manages wing tactics review board IAW MCR 55-133.
- A1.9.** Develops procedures for timely dissemination of weapons, tactics, combat and intelligence information to applicable unit.
- A1.10.** Acts as OPR for unit weapons and tactics training.
- A1.11.** Establishes and supervises wing participation in weapons competitions (Proud Shield/Gunsmoke/William Tell/Top Gun/Top Scope) armament recording programs and combat airdrop training (Red Flag/Green Flag/Maple Flag).
- A1.12.** Reports bombing and Electronic Countermeasure (ECM) data.
- A1.13.** Participates in the aircrew/controller area verification and certification program.
- A1.14.** Acts as approving authority for drop zone surveys.
- A1.15.** Manages the Range Control Officer program.
- A1.16.** Maintains liaison with lateral units, as necessary, to increase training effectiveness and realism through the use of outside assets (e.g., ranges, command and control systems, support aircraft, and threat simulators).
- A1.17.** Reviews applicable technical orders and regulations for errors; identifies deficiencies to applicable Headquarters OPRs.
- A1.18.** Acts as OPR for all unit composite force training.
- A1.19.** Chairs malfunction/incident review panel. Investigates, prepares and coordinates malfunction report, and submits malfunction report to higher headquarters.

A1.20. Types communication; processes unclassified distribution; maintains unclassified correspondence file; maintains classified material; maintains unclassified publication file; maintains stock of blank forms; and maintains status chart or bulletin board.

AF Form 1113, JUN 91 (COMPUTER GENERATED). PREVIOUS EDITION IS OBSOLETE.

VARIANCES

Weapons and Tactics Flight

A3.1. Title. Positive Mission Variance for Air Weapons Controller at Collocated Ground Control Intercept (GCI) Units.

A3.1.1. Definition. Provides whole manpower support required to support integrated AWACS/GCI issues for the wing. These issues include semiannual weapons and tactics training and composite force training. Also serves as a member of the wing mission planning cell for exercise and wartime operations.

A3.1.2. Impact: +11 (+1 AFSC 13B3X CPT per location (Shaw +2)).

A3.1.3. Applicability. Spangdahlem AB, Aviano AB, Elmendorf AFB, Kadena AB, Osan AB, Langley AFB, Moody AFB, Shaw AFB, Eglin AFB, and Hill AFB.

A3.2. Title. Positive Mission Variance for Wing Radar Strike Officer.

A3.2.1. Definition. This variance provides the whole manpower required to manage extensive targeting and imagery requirements. Responsible for managing and coordinating all of radar systems and functions. Position is the functional manager for the inception, development, employment, and maintenance for all contingency and training target folders. Rated expertise is needed to interface with intelligence/imagery specialists and other space/reconnaissance assets.

A3.2.2. Impact. +1 AFSC 11F3Y/12F3Y CPT per location with a fighter wing.

A3.2.3. Applicability. All fighter wings (except Eglin AFB).

A3.3. Title. Positive Mission Variance for Theater Liaison Officer for Theater Airlift.

A3.3.1. Definition. Ramstein AB: Responsible for coordination, planning, and mission preparation for all Joint Airborne/Air Transportability(JA/ATT) training missions in Europe, including those flown by Air Reserve, AMC, and ACC crews. Yokota AB: Performs staff-level duty whose primary responsibility is US Army Japan, IX Corps. Determines the feasibility of strategic/theater airlift support requirements and develops operational procedures for employment of airlift aircraft as requested by Army unit commanders.

A3.3.2. Impact. +2 (+1 AFSC 11X3/12X3 Capt each location).

A3.3.3. Applicability. Ramstein AB and Yokota AB.

A3.4. Title. Positive Mission Variance for Enlisted Crew Member at AMC Tanker Units.

A3.4.1. Definition. AMC tanker units require a boom operator or flight engineer on their weapons and tactics staff in order to successfully perform the tanker mission. A weapons and tactics shop supporting three or less tanker squadrons does not require a full-time administrative specialist. However, a weapons and tactics shop supporting four or more tanker squadrons requires both a 3A051 and a 1A071/1A171.

A3.4.2. Impact. +0 May convert 1 AFSC 3A051 to AFSC 1A071/1A171 (wings having 3 or less tanker units)
+1 AFSC 1A071/1A171 (wings having 4 or more tanker units)

A3.4.3. Applicability. All AMC tanker units.

A3.5. Title. Positive Mission Variance for Electronic Warfare Officer.

A3.5.1. Definition. Core authorizations at bomber and fighter units do not provide for an authorization to centrally manage an Electronic Countermeasure (ECM) program. This function will manage unit EC training, the Electronic Warfare Integrated Reprogramming (EWIR) process including Serene Byte exercises and Pacer Ware actions, acts as the liaison between the operations and maintenance functions for ECM equipment. Additionally, this function will run an Electronic Warfare training program to ensure crews understand the capabilities and limitations of the ECM equipment.

A3.5.2. Impact. +1 11F3Y or 12F3W Captain per location (+2 at Holloman AFB).

A3.5.3. Applicability. All ACC and PACAF wings, RAF Lakenheath, Spangdahlem AFB, Luke AFB, and Tyndall AFB.

A3.6. Title. Positive Mission Variance for Wing Tactical Strike Officer.

A3.6.1. Definition. This variance provides the whole manpower required to manage extensive targeting requirements, imagery requirements, crew briefing, and post-target Bomb Damage Assessment (BDA). Additional responsibilities include determining ingress and egress based on enemy threats, terrain, and mission requirements, as well as debriefing crews and staff on mission success and restrike. These responsibilities require rated expertise to interface with intelligence/imagery specialists and other space/reconnaissance assets.

A3.6.2. Impact. +8 (+2 - W12XX CPT per location).

A3.6.3. Applicability. Barksdale AFB, Ellsworth AFB, Minot AFB, and Dyess AFB.

A3.7. Title. Positive Mission Variance for Airlift Specialists to Support a Combined Bomber and Airlift Wing.

A3.7.1. Definition. This AFMS allows only one additional staff position for the C-130 as the secondary aircraft. The airdrop mission requires a minimum of one full C-130 crew, which consists of a pilot, navigator, and loadmaster. The mission and capability of the B-1B and C-130 are so dissimilar that all of the additional workload of the C-130 mission cannot totally be absorbed by the manpower earned for having the B-1B as the primary aircraft.

A3.7.2. Impact: +2 manpower requirements (1 AFSC 11A3K/12A3C Capt, 1 AFSC 1A271 MSgt).

A3.7.3. Applicability. Dyess AFB.

A3.8. Title. Positive Mission Variance for Multi-Stage Improvement Program (MSIP).

A3.8.1. Definition. MSIP is a classified program that enhances wing combat capability by providing central guidance on all aspects of F-15 MSIP operations, maintenance, and security. The MSIP work center serves as a direct liaison with MAJCOM and other high-level governmental and civil agencies to coordinate worldwide MSIP issues. The organization plans and executes changes to aircraft systems, develops operations and maintenance operating instructions and training syllabi and forecasts requirements for MSIP F-15 enhancements.

A3.8.2. Impact. +3 manpower requirements per wing.
(1 Maj W11F3F, 1 SMSgt 2A390, and 1 MSgt 2A371)

A3.8.3. Applicability. All wings with F-15 A-D PAI.

A3.9. Title. Positive Mission Variance For Additional Loadmaster Position.

A3.9.1. **Definition.** Oversees the wing Joint Airdrop Inspection (JAI) program to ensure assigned Air Force JAIs are current and qualified to support tasked requirements on any aircraft performing an aerial delivery mission. Tasks JAI loadmasters to deploy in support of worldwide operations.

A3.9.2. **Impact.** +1 AFSC 1A271.

A3.9.3. **Applicability.** Little Rock AFB.

A3.10. Title. Positive Mission Variance for C-141 Airdrop School House Manager.

A3.10.1. **Definition.** Monitors the local airdrop upgrade and formation aerial refueling upgrade. This requirement was established by HQ AMC/XOTI.

A3.10.2. **Impact.** +3 (+1 1A071 per location).

A3.10.3. **Applicability.** McChord AFB, Charleston AFB, and McGuire AFB.

A3.11. Title. Positive Mission Variance for F-16 Block 50D Harm Targeting System (HTS).

A3.11.1. **Definition.** F-16 Block 50D SEAD includes a classified program to enhance mission effectiveness by providing central guidance on all aspects of Block 50D and HTS operations, maintenance, and security. The Block 50D work center serves as a direct liaison with MAJCOM and other high-level government and civil agencies to coordinate worldwide Block 50D HTS issues. The organization plans and executes changes to aircraft systems, develops operations and maintenance operations instructions and training syllabi, and forecasts requirements for Block 50S and HTS enhancements.

A3.11.2. **Impact.** +3 manpower requirements.
(1 Capt W11F3H, 1 - 2A372, and 1 - 2A373)

A3.11.3. **Applicability.** 432 FW, Misawa.

A3.12. Title. Positive Mission Variance for Addition of Target Study/Operations Planning Officers.

A3.12.1. **Definition.** Core authorizations do not support the level of work required by B-52 Flying Training Unit activities. Additional taskings include daily briefings, target study, analysis of radar camera film, mission debriefing on both bombing and ECM results, and coordinating range activity for weapons delivery for student missions.

A3.12.2. **Impact.** +2 K12B3E.

A3.12.3. **Applicability.** Barksdale AFB.

A3.13. Title. Positive Mission Variance for Have Nap and Harpoon Missile Systems on B-52.

A3.13.1. **Definition.** This variance provides additional manpower required for specialized crew training, strike planning, mission analysis, and coordination between wing, logistics, and higher headquarters. Daily training with the Have Nap missile requires extensive debriefing and analysis. Additional workload is required for the interservice training and coordination of tactics required for Harpoon employment.

A3.13.2. **Impact.** +3 manpower requirements.

Barksdale AFB	+2 K12B3E (1 for Have Nap and 1 for Harpoon)
Minot AFB	+1 K12B3E (Harpoon)

A3.13.3. **Applicability.** Barksdale AFB and Minot AFB.

A3.14. Title. Positive Mission Variance for AT-38 Squadron at Holloman AFB.

A3.14.1. **Definition.** This variance provides additional manpower required for support of Foreign Military Sales (FMS) funded by the Taiwanese in AT-38 aircraft. The scope of training associated with this aircraft warrants an additional authorization.

A3.14.2. **Impact.** +1 11F3Q.

A3.14.3. **Applicability.** Holloman AFB NM.

PROCESS ANALYSIS SUMMARY**Weapons and Tactics Flight**

PROCESS TITLE	FRACTIONAL MANPOWER
1. Ensures familiarization with mission/tasking and threat.	*
2. Assesses combat capability of the unit.	*
3. Adequate procedures for combat/operational missions.	*
4. Liaison with maintenance, munitions, and avionics functions.	*
5. Liaison with unit intelligence.	*
6. Ensures sound tactics in unit training/exercise/evaluation.	*
7. Ensures mission qualification flights reflect unit taskings.	*
8. Tactics development program and tactics review board.	*
9. Disseminates pertinent information to applicable unit.	*
10. Acts as OPR for unit weapons and tactics training.	*
11. Establishes and supervises weapons competitions and combat airdrop training.	*
12. Reports ECM data.	*
13. Aircrew/controller area verification/certification program.	*
14. Acts as approving authority for drop zone surveys.	*
15. Range Control Officer program.	*
16. Liaison with lateral units.	*
17. Reviews and identifies deficiencies in technical orders and regulations.	*
18. Acts as OPR for all unit composite force training.	*
19. Chairs malfunction/incident review panel.	*
20. Administration.	*

TOTAL FRACTIONAL MANPOWER	5

* Fractional manpower for each process varies among mission types. There is no one fractional manpower breakout for all missions.

APPLICATION WORKSHEET

WEAPONS & TACTICS

Step 1. Enter the primary aircraft type (WLF X2) here: _____

Step 2. Determine the manpower requirement by locating the primary aircraft type (from Step 1) and the associated manpower requirement in the following matrix.

AIRCRAFT: A-10/OA-10, B-2, EC-137, F-15(A-D), F-16, F-22, F-117, HH-1, KC-10, UH-1, U-2			
Crew Position	Title	Grade	Manpower Requirement
PILOT	FLIGHT CHIEF	LTC	1
PILOT	STAFF OFFICER	CPT	3
	3A051	SSG	1

AIRCRAFT: C-135, C-137, E-4, EC-135, F-15E, F-111, KC-135, OC/WC-135			
Crew Position	Title	Grade	Manpower Requirement
PILOT/NAV	FLIGHT CHIEF	LTC	1
PILOT/NAV	STAFF OFFICER	CPT	4
	3A051	SSG	1

AIRCRAFT: EF-111, F-4G			
Crew Position	Title	Grade	Manpower Requirement
PILOT/EWO	FLIGHT CHIEF	LTC	1
PILOT/EWO	STAFF OFFICER	CPT	4
	3A051	SSG	1

AIRCRAFT: AC-130, B-1, B-52, EC-130, RC-135			
Crew Position	Title	Grade	Manpower Requirement
PILOT/NAV/EWO	FLIGHT CHIEF	LTC	1
PILOT/NAV/EWO	STAFF OFFICER	CPT	5
	3A051	SSG	1

AIRCRAFT: C-17, CV-22			
Crew Position	Title	Grade	Manpower Requirement
PILOT	FLIGHT CHIEF	LTC	1
PILOT	STAFF OFFICER	CPT	3
	1A271	MSG	1
	3A051	SSG	1

AIRCRAFT: C-5, C-130, C-141			
Crew Position	Title	Grade	Manpower Requirement
PILOT/NAV	FLIGHT CHIEF	LTC	1
PILOT/NAV	STAFF OFFICER	CPT	4
	1A271	MSG	1
	3A051	SSG	1

AIRCRAFT: HH-60, MH-53, MH-60			
Crew Position	Title	Grade	Manpower Requirement
PILOT	FLIGHT CHIEF	LTC	1
PILOT	STAFF OFFICER	CPT	3
	1T271	MSG	1
	3A051	SSG	1

AIRCRAFT: MC-130			
Crew Position	Title	Grade	Manpower Requirement
PILOT/NAV/EWO	FLIGHT CHIEF	LTC	1
PILOT/NAV/EWO	STAFF OFFICER	CPT	5
	1A271	MSG	1
	3A051	SSG	1

AIRCRAFT: HC-130			
Crew Position	Title	Grade	Manpower Requirement
PILOT/NAV	FLIGHT CHIEF	LTC	1
PILOT/NAV	STAFF OFFICER	CPT	4
	1A271	MSG	1
	1T271	MSG	1
	3A051	SSG	1

AIRCRAFT: E-3, E-8			
Crew Position	Title	Grade	Manpower Requirement
PILOT/NAV	FLIGHT CHIEF	LTC	1
PILOT/NAV	STAFF OFFICER	CPT	4
	1A471	MSG	1
	3A051	SSG	1

Step 3. Add 1 staff officer captain position for each MDS above the core of 1 MDS (WLF X1). _____

Step 4. Subtract 1 staff officer captain position for each aircraft operations squadron (WLF X3) less than the core of three (e.g., a wing with only 1 aircraft operations squadron should subtract 2). _____

Step 5. Add 1 staff officer captain position for each aircraft operations squadron (WLF X3) more than the core of 3 unless it already earned one in Step 3 above. _____

Step 6. Subtract 1 staff officer captain position for the F-15A-D air-to-air mission. _____

Step 7. Add or subtract applicable variances from Attachment 3. _____

Step 8. **Total Manpower Requirement** - Sum the Steps 2 through 7. _____

Step 9. Use the results of previous steps and the notes below to complete the following table.

MANPOWER TABLE			
WEAPONS AND TACTICS FLIGHT			
Position	AFSC	Grade	Manpower Requirement
Flight Chief	*	LTC	1
Weapons & Tactics Staff	*	CPT**	
Aircraft Loadmaster Craftsman	1A271	MSG	
Pararescue Craftsman	1T271	MSG	
Airborne Warning C & C Sys Craftsman	1A471	MSG	
Information Management Journeyman	3A051	SSG	
TOTAL MANPOWER:			

* Use an AFSC appropriate for the assigned weapon system.

** One MAJ staff requirement should be substituted for one of the CPT positions when the total manpower requirement is 10 or greater.